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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/616,132	07/08/2003	Jiann-Shuoh Liaw	JCLA7920	2096
23900	7590	04/19/2005	EXAMINER	
J C PATENTS, INC.			ULLAH, AKM E	
4 VENTURE, SUITE 250			ART UNIT	
IRVINE, CA 92618			.PAPER NUMBER	

2874

DATE MAILED: 04/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/616,132	<b>Applicant(s)</b> LIAW, JIANN-SHUOH	
	<b>Examiner</b> Akm Enayet Ullah	<b>Art Unit</b> 2874	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

### ***Detailed Action***

*Applicant cooperation is requested in correcting any errors of which applicant may become aware in the specification.*

### ***Status of the Application***

*Claims 1- 22 are pending in this application.*

*Claims 12-20 are allowable over the prior art as of record.*

*If applicant is aware of any prior art or any other co- pending application not already of record, he/she is reminded of his/her duty under 37 CFR 1.56 to disclose the same.*

*If applicant provides prior art, he/she is requested to cite it on form PTO-1449 in accordance with the guideline set forth in MPEP 609.*

### ***Drawings***

*This application has been filed on July 08, 2003 with informal drawings, which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.*

***Claim Rejections - 35 USC § 103***

*The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this*

*Office action:*

*(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.*

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in

order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

***Claims 1-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fuchs et al (USPNO. 6,795,198) or Banet et al (USPNO. 6,118,533).***

***Both references disclose a method and apparatus comprising***

***the steps of:***

***providing a substrate (figure 1, numeral 10 of Banet et al and figure 1A, numeral 11 of Fuchs et al) with a polished surface having a plurality of reflective regions thereon,***

***providing a pulsed laser beam ( figure 1A , numeral 12' & 12'' of Fuchs et al and figure 1, numeral 12' & 12'' of Banet et al) that shines on the reflective regions on the substrate to produce a grating pattern through optical interference***

***providing a cylindrical lens (optical system consist of lens in Fuchs et al and beam delivery system consists of lens in Banet et al) for adjusting the configuration of the grating pattern.***

***Regarding reflective region has at least a reflective surface such that all the reflective surfaces are parallel to each other as claimed in claims 4 & 15 and,***

***the light incident surface comprises a plane rectangular surface as claimed in claims 9 & 22 are clearly shown in figures 1 and 1A of the both references.***

***Regarding claims 7-9, and 17-19 the limitations of a protective layer is fabricated using a dielectric material and the lens is being a cylindrical lens is mentioned in column 8, last paragraph of Fuchs et al.***

***Regarding claims 10 & 21 wherein the grating pattern produces a surface acoustic wave transmission on a surface film of the substrate is very elementary teachings in this art***

***and also being discussed by both references (page 2 of Fuchs et al and column 11, first paragraph of Banet et al).***

***Both references differ from the claimed invention because he does not explicitly disclose the Vicker's micro-hardness tester as claimed in claims 2 & 13.***

***Banet et al is the evidence that ordinary skill in the art would find a reason, suggestion or motivation to have the Vicker's micro-hardness tester in any one of the above mentioned reference since, column 1 of Banet et al explained a conventional semiconductor fabrication process in a typical optical method and apparatus.***

***Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the method and apparatus of any one of the above mentioned reference using Vicker's micro-hardness tester in order to perform a imprinting operation as claimed.***

***It is noted that applicant has not described such Vicker's micro-hardness tester as being critical or as yielding unexpected benefits. Certainly a person of ordinary skill in the art would find it beneficial to achieve more uniform bright and dark line distribution, a better bright and dark line contrast and higher resolution wherever possible.***

***Claims Are Allowed***

Claims 12-20 are allowed over the prior art as of record.

***Contact Information***

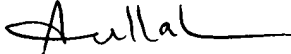
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Akm Enayet Ullah whose telephone number is 571-272-2361. The examiner can normally be reached on Monday through Wednesday from 5:30 am to 4 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick, can be reached on Monday through Friday @ 571-272-



Art Unit: 2874

2344. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Akm Enayet Ullah  
Primary Examiner  
Art Unit 2874

Aullah

April 07,2005